



# POWERGRID

**Fastest Growing Electric Utility in the World**

**Press & Analysts' Meet**

**November 12, 2014 Mumbai**

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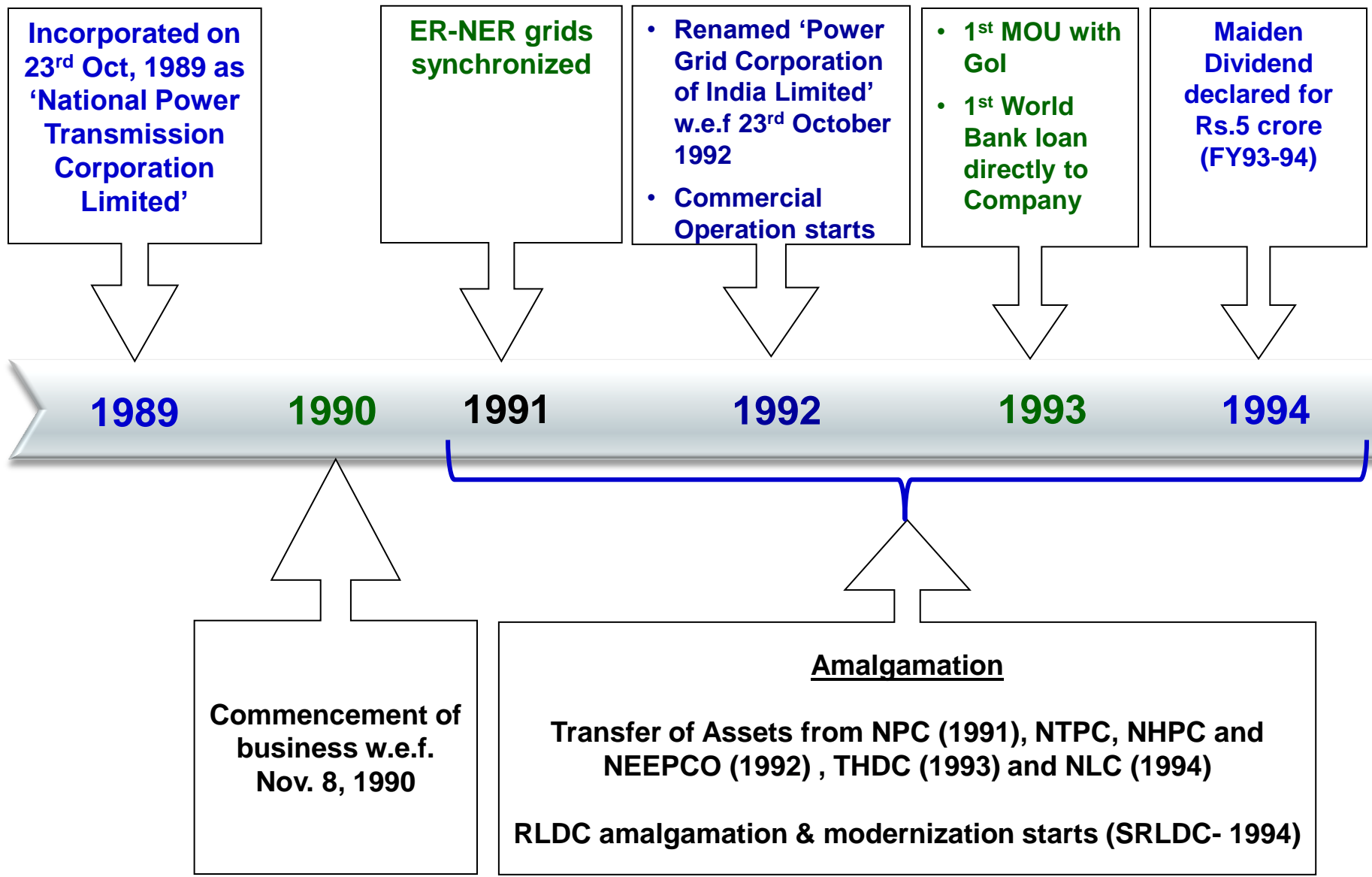
# Recent Highlights



Company completes 25 years

Power Supply Restoration (post natural calamities) - J&K and Andhra Pradesh

Fastest Growing Electric Utility in the World<sup>1</sup>



Company receives ISO 9001 (1994) Quality System Certification for turnkey execution of 400kV trans. projects

Awarded 1996-ARTDO Asia-Pacific Award (Only PSU in Asia Pacific Region)

- Turnover crosses Rs.1000 crore
- 1<sup>st</sup> ever National Consultation in Asia to finalize ESPP

Jointly promoted Power Trading Corporation of India Ltd.

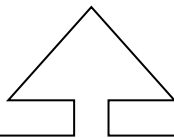
1995

1996

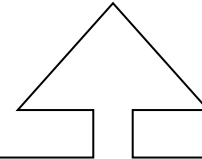
1997

1998

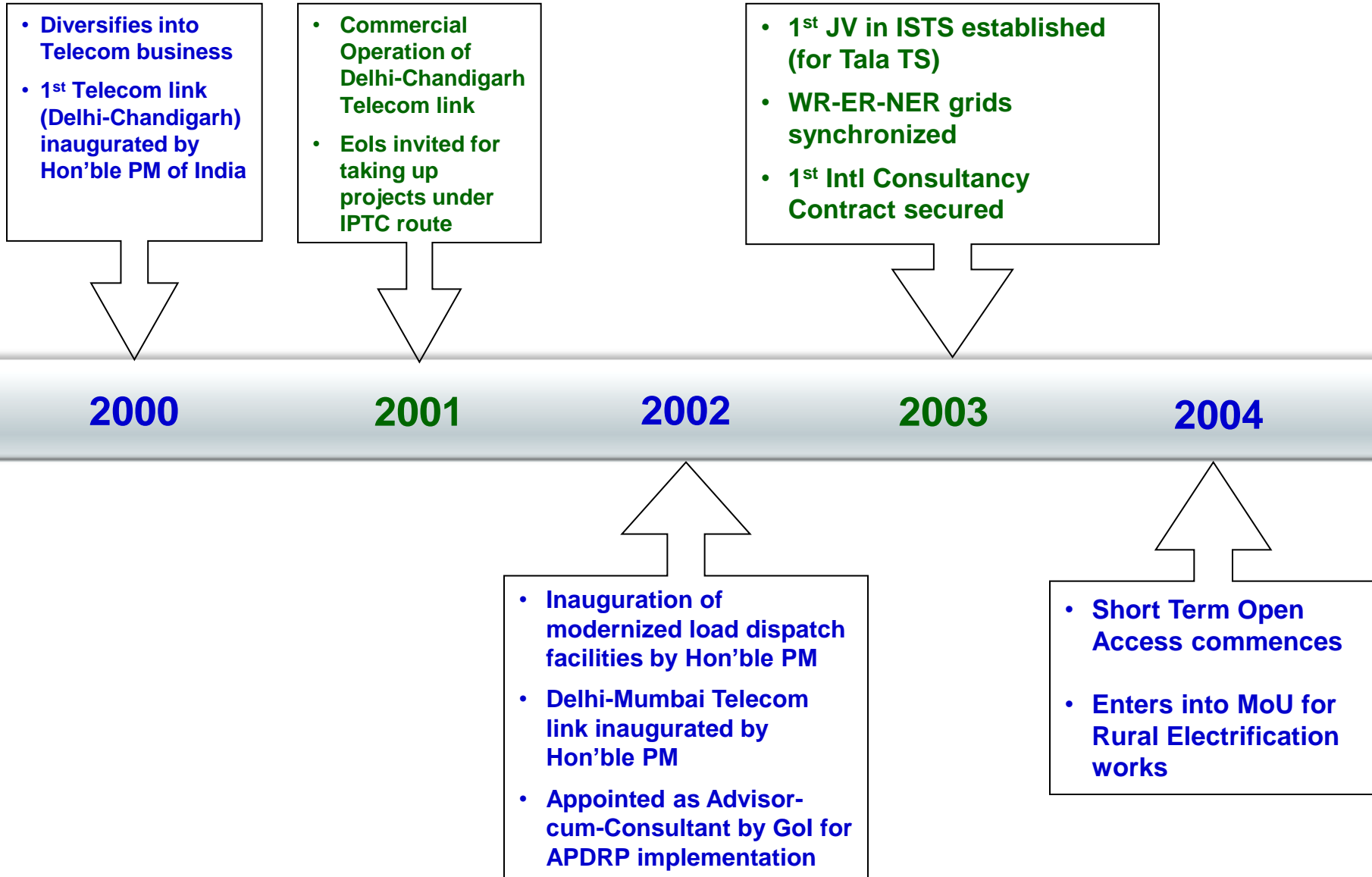
1999



**Amalgamation & Modernization**  
 Amalgamation of RLDCs completed.  
 Modernization of RLDCs starts.



- Notified as 'Central Transmission Utility'
- Declared as Mini-Ratna Category I PSU
- Chandrapur HVDC commissioned
- Demonstrated use of ERS under natural calamity



- +/-800kV HVDC conceived for power transfer from NER
- WAMS conceived for introducing Smart Power Delivery System

**2005**

- NR grid synchronized with WR-ER-NER grid to form 'NEW' Grid
- Profits cross Rs.1000 crore
- Commissions 100<sup>th</sup> sub-station (Amritsar)

**2006**

- Declared as 'Navratna' enterprise by GoI
- Turnover crosses Rs.5000 crore
- Ranked as world's 3<sup>rd</sup> largest Trans. Co. by The World Bank

**2008**

- Initial Public Offer of Equity Shares
- Shares listed on BSE and NSE
- 1<sup>st</sup> 765kV line (Sipat - Seoni) commissioned
- 1<sup>st</sup> GIS commissioned (Maharanibagh)

**2007**

- NLDC established
- POSOCO incorporated for Grid Mgmt.
- Prestigious Afghanistan project completed

**2009**



- Joins Gol for NKN Project (Telecom)
- 1<sup>st</sup> Follow On Public (FPO)
- 1<sup>st</sup> Sustainability Report released (for FY09) - 1<sup>st</sup> Power Sector CPSU

- Implementation of NTAMC taken up
- Participates in TBCB for the 1<sup>st</sup> time and emerges successful

- Intl. Credit Rating by S&P and Fitch
- 1<sup>st</sup> Foreign Currency Bond issue
- 2<sup>nd</sup> Follow On Public Offer
- SR synchroized with NEW Grid: 'One Nation- One Grid- One Frequency'
- 1<sup>st</sup> Mgmt Contract (Intl) secured
- Joins Gol for NOFN Project (Telecom)
- Bangladesh interconnection established



2010

2011

2012

2013

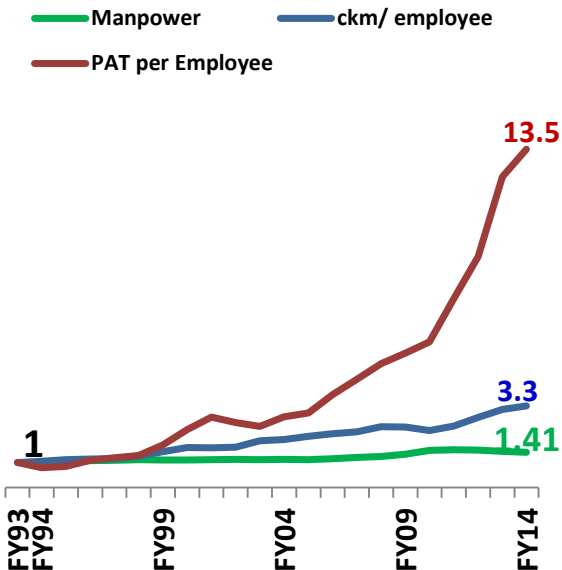
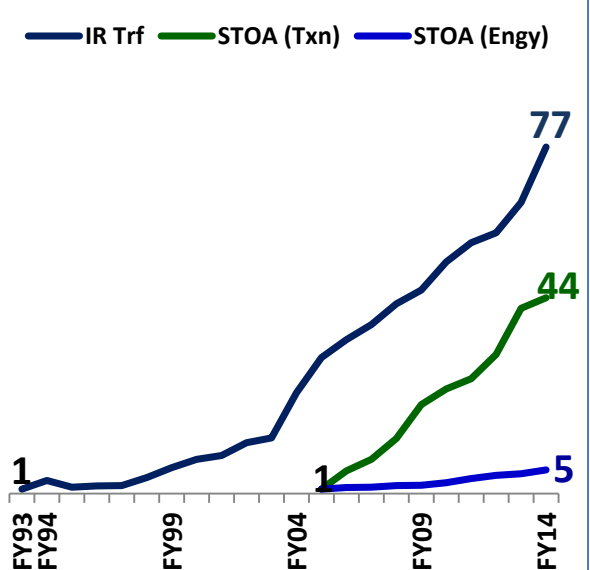
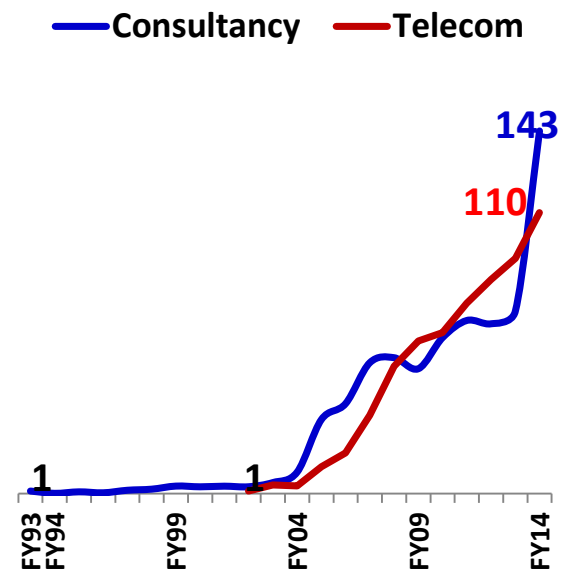
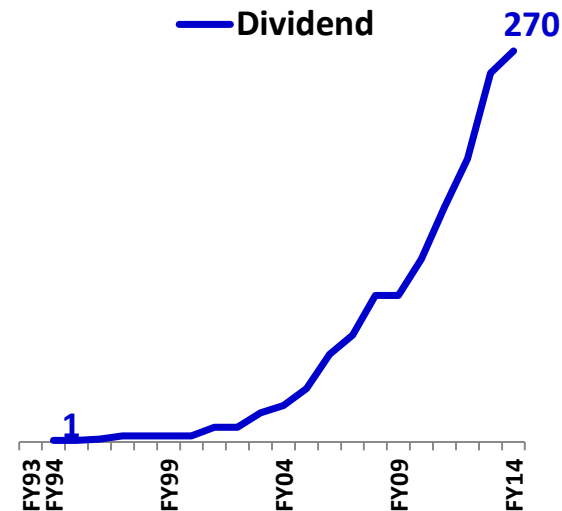
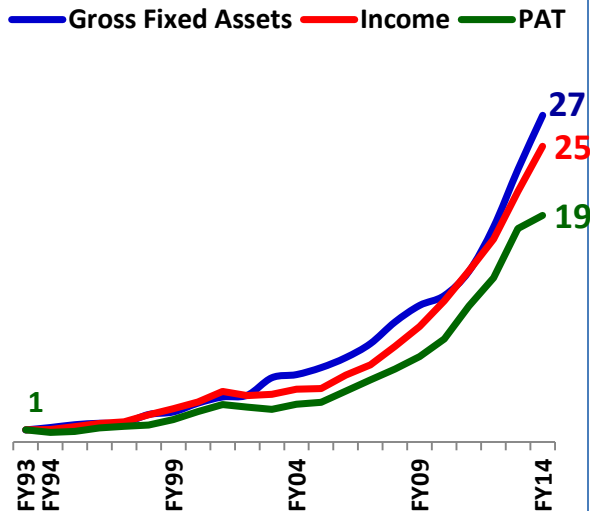
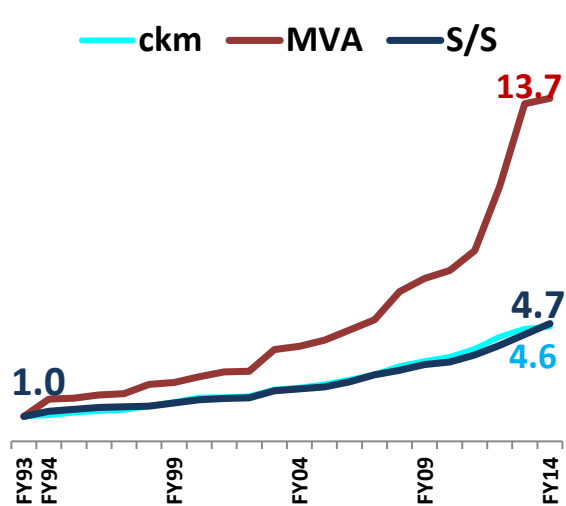
2014

- Adoption of 'Vision' Statement
- 1200kV Test line charged (highest trans. Voltage in world)
- India's 1<sup>st</sup> Smart Grid Control Center established at Puducherry under pilot project
- Turnover crosses Rs.10,000 crore
- 1<sup>st</sup> Intl. JV Agreement signed (with NEA in Nepal)

- Implementation of Green Energy Corridors starts
- NTAMC operation starts
- Aerial Patrolling of TLs undertaken
- Gol assigns NER & J&K works
- Becomes Fastest Growing Electric Utility globally

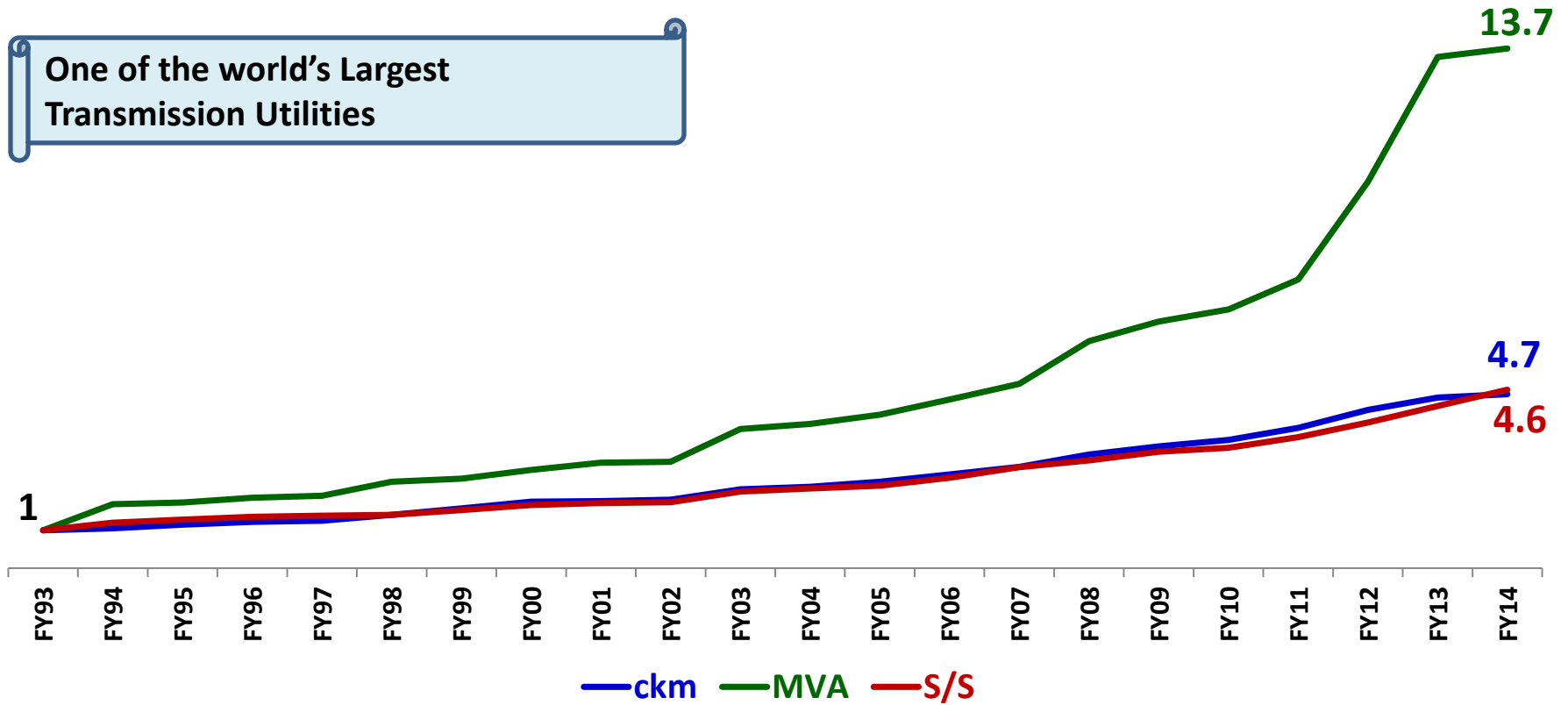


# 25 years of Energizing India



## Transmission Lines, Sub-stations and X-formation Capacity

One of the world's Largest Transmission Utilities



(as on 31.03.2014)

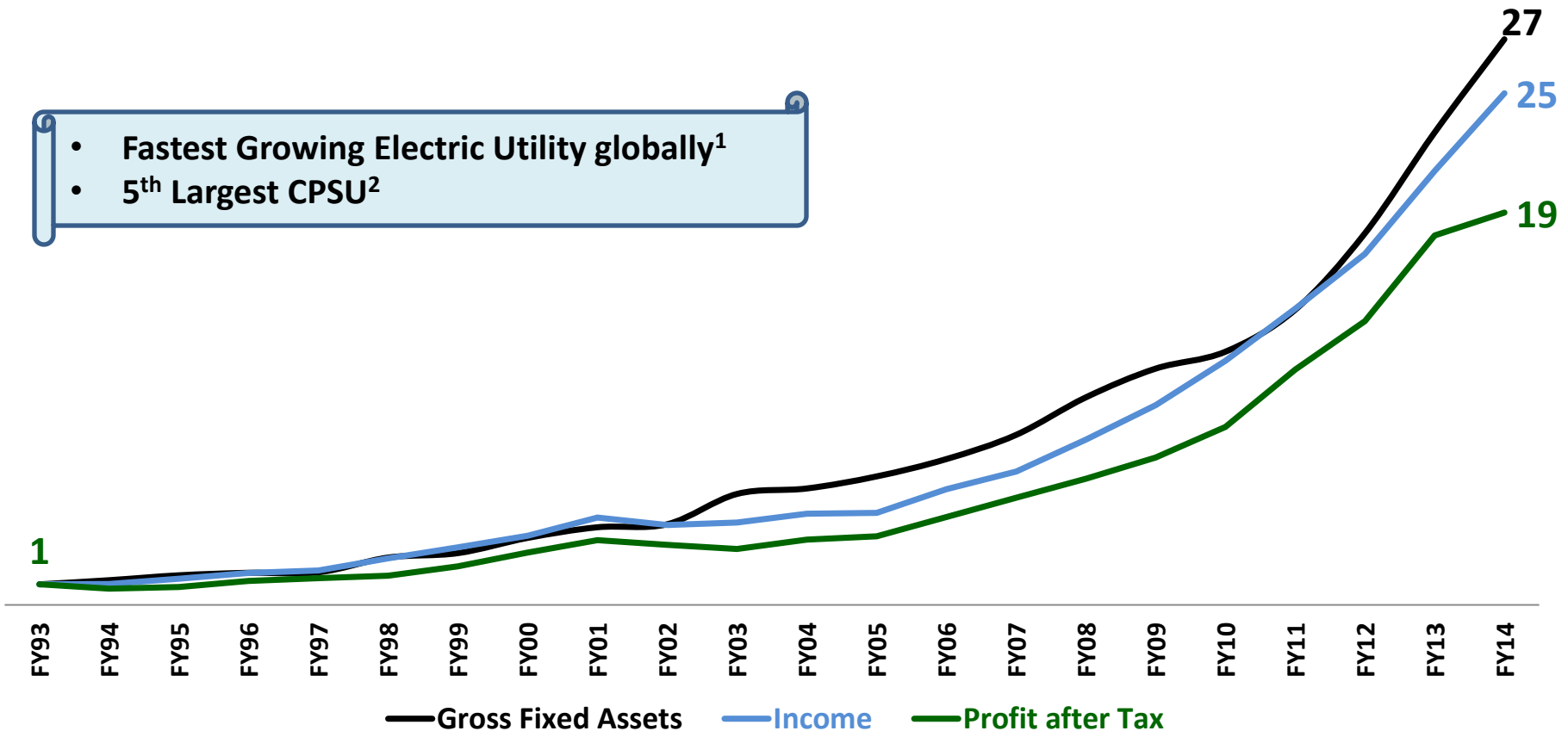
106,804 ckm; 186 S/S & 213,819 MVA

# 25 years of Building Assets & Creating Wealth



## Gross Fixed Assets, Income & Profit after Tax

- Fastest Growing Electric Utility globally<sup>1</sup>
- 5<sup>th</sup> Largest CPSU<sup>2</sup>



- Gross Fixed Assets (31.3.14): ₹ 96,504 cr.
- Income (FY14): ₹ 15,721 cr.
- PAT (FY14): 4,497 cr.

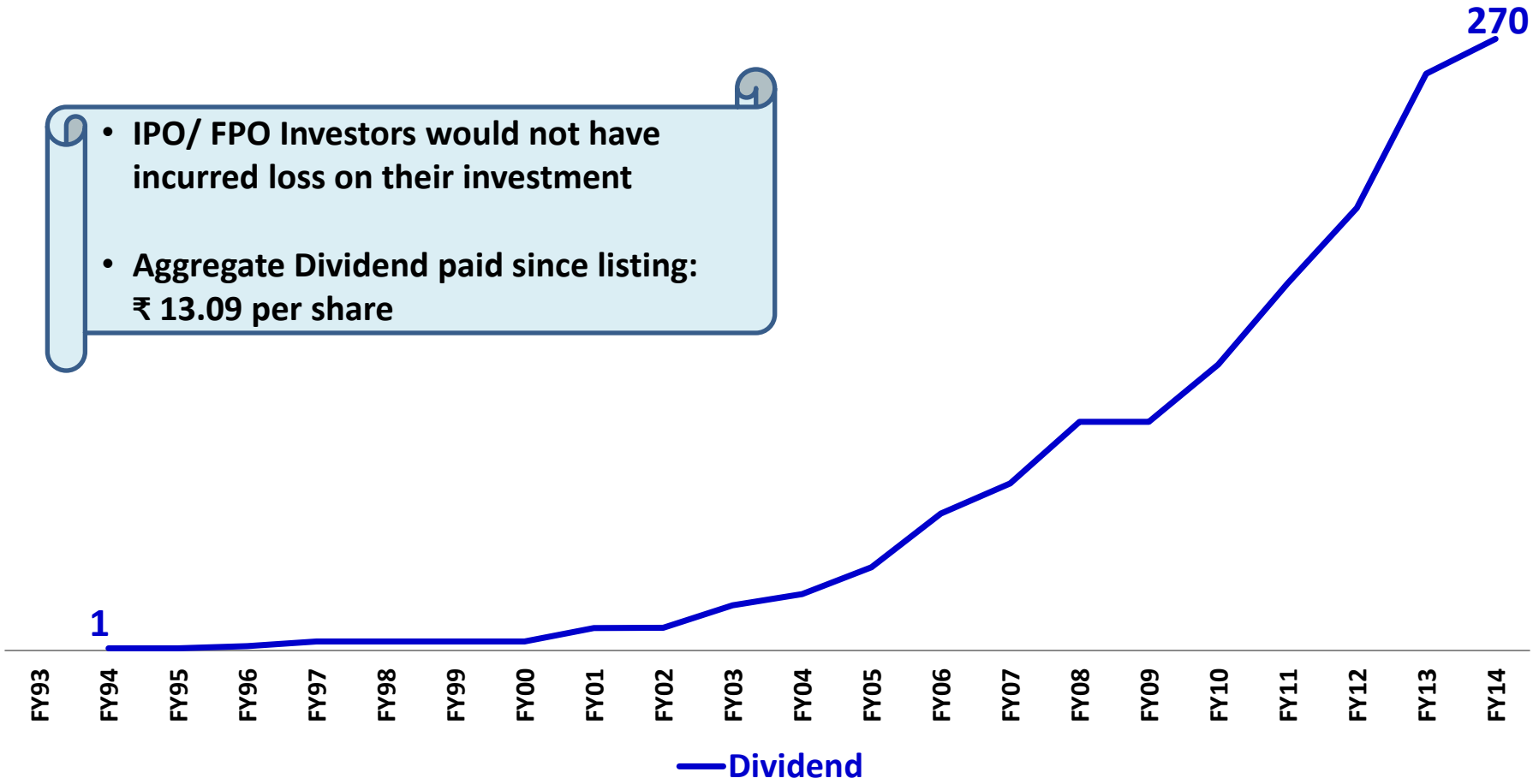
1- Based on Platts Top250 Ranking of Global Energy Cos. For 2014  
 2-As per PSE Survey 2013 of DPE, GoI

# 25 years of Distributing Wealth



## Dividend

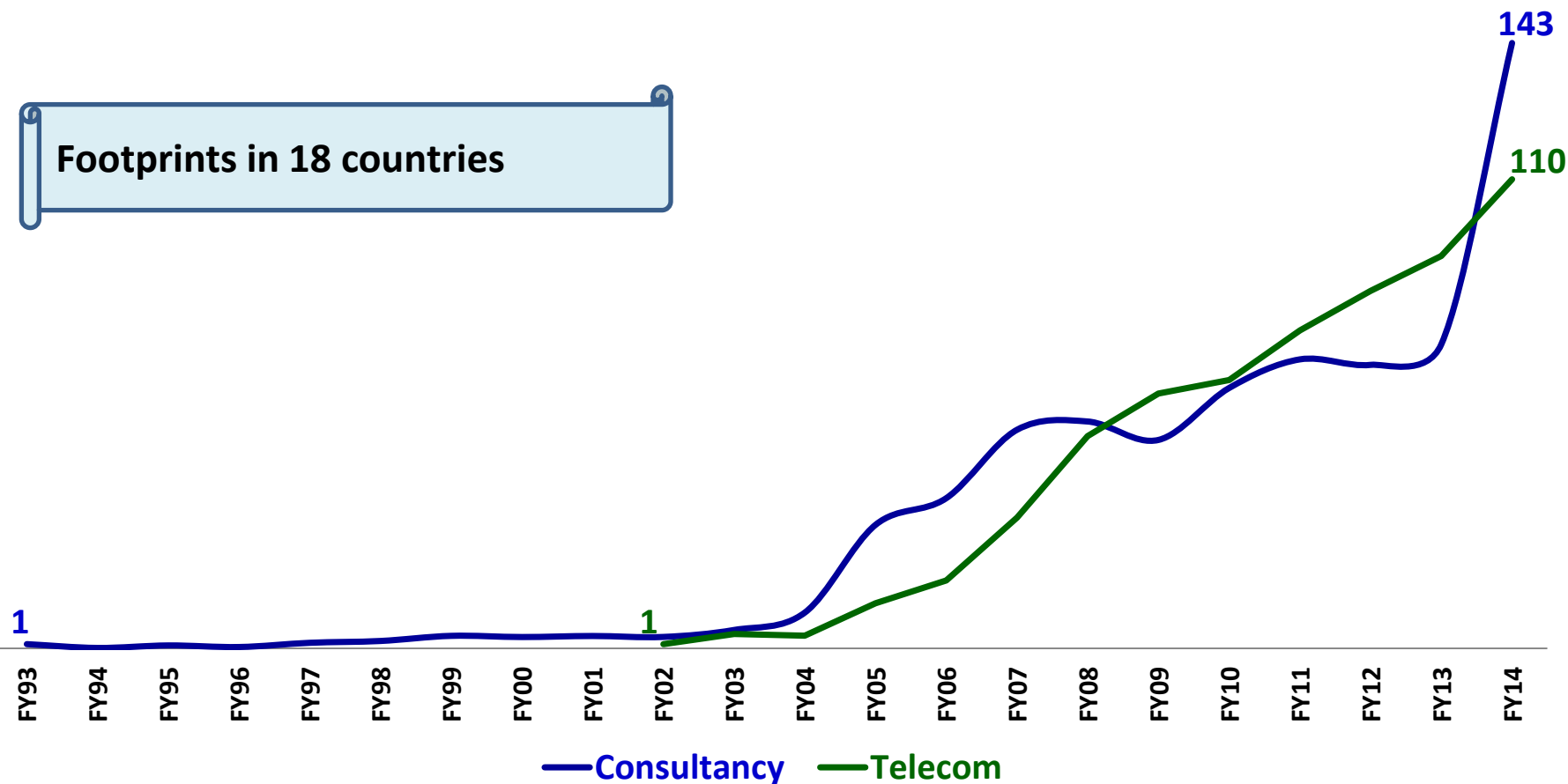
- IPO/ FPO Investors would not have incurred loss on their investment
- Aggregate Dividend paid since listing: ₹ 13.09 per share



FY13-14: ₹ 1,350 cr

## Consultancy & Telecom

Footprints in 18 countries



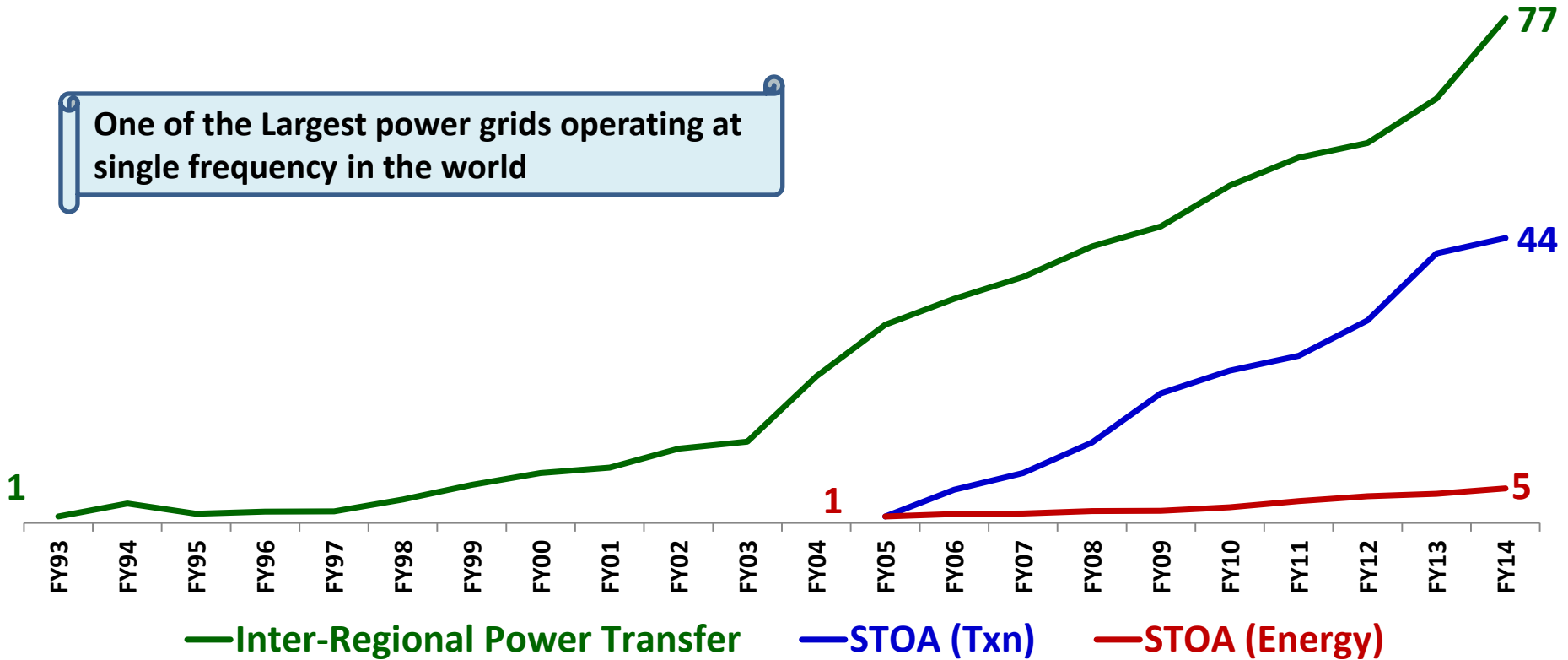
- Consultancy Income (FY14) : ₹ 627 cr.
- Telecom Income (FY14) : ₹ 276 cr.

# 25 years of Optimizing Resources



## Inter-Regional Power Transfer & Short Term Open Access

One of the Largest power grids operating at single frequency in the world

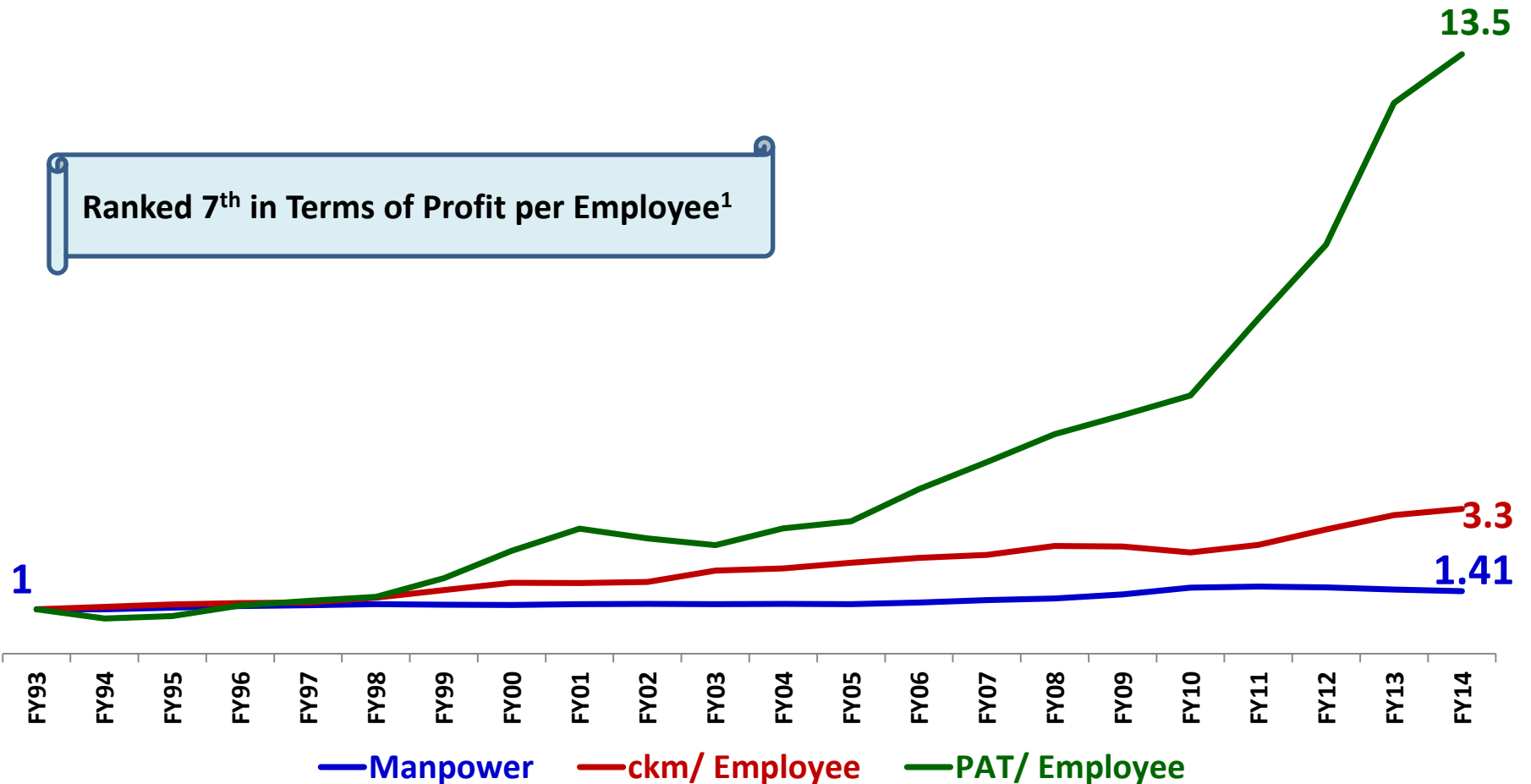


- Inter-Regional Power Transfer: 78 BU
- STOA (No. of transactions): ~ 34,000
- STOA (Energy transacted): 87 BU

# 25 years of Employee Efficiency



## Employee Efficiency



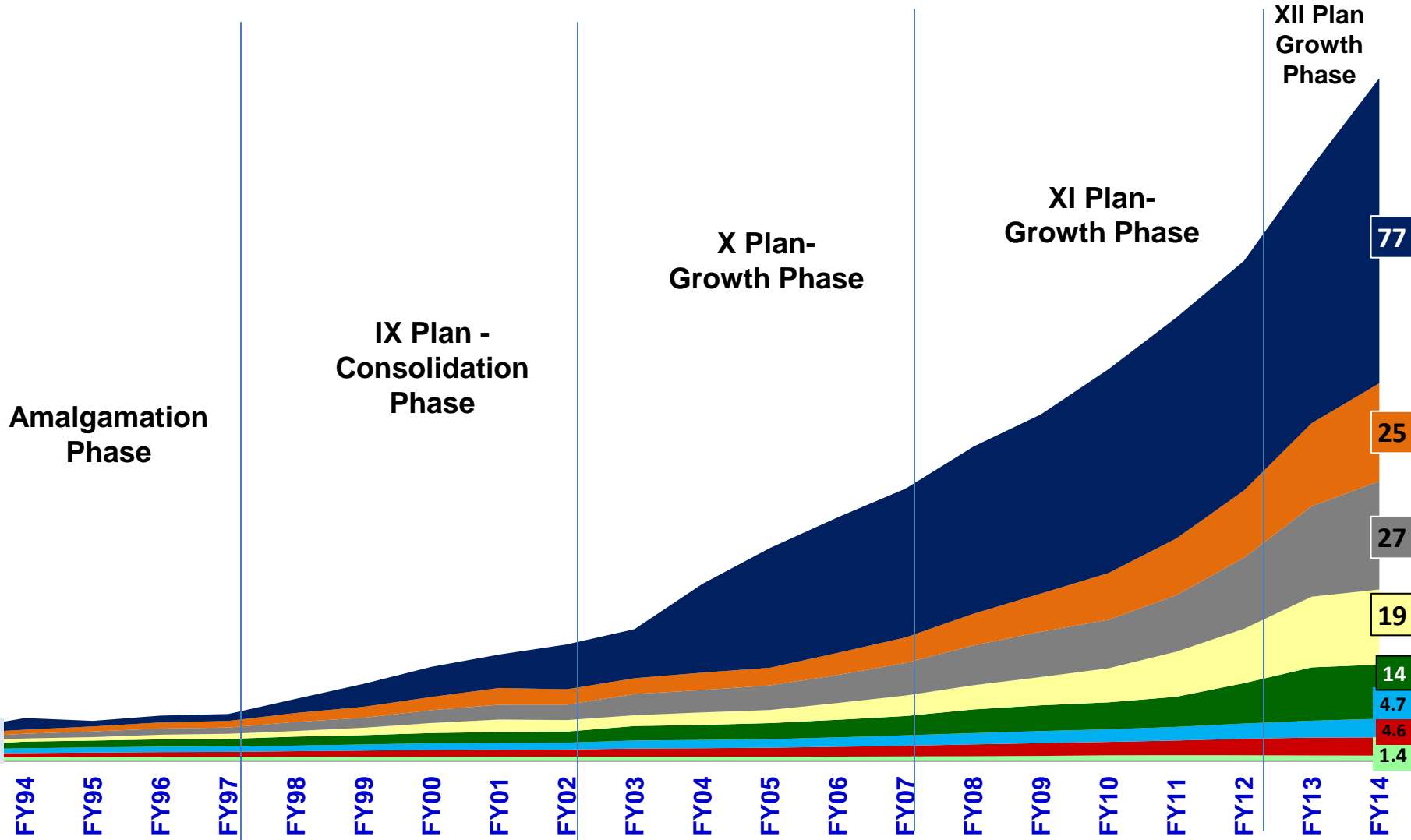
- Employees (as on 31.3.2014) : 8,694
- ckm per Employee (as on 31.3.2014): 11.7
- Profit After Tax per Employee (FY14): ₹ 51.7 lakh

1- As per Businessworld BW Real500 rankings (Oct 2011 issue)

# 25 years of Growth – A Summary



■ Manpower 
 ■ ckm 
 ■ S/S 
 ■ MVA 
 ■ Profit after Tax 
 ■ Gross Fixed Assets 
 ■ Income 
 ■ Inter-Regional Power Transfer





# POWERGRID Today

A 'NAVRATNA'  
ENTERPRISE

CENTRAL  
TRANSMISSION  
UTILITY

LISTED  
COMPANY  
since 2007

GOVT.  
SHAREHOLDING  
57.90%

PAYING  
DIVIDEND SINCE  
1993-94

## Vision

*World Class, Integrated, Global Transmission Company With Dominant Leadership in Emerging Power Markets  
Ensuring Reliability, Safety and Economy*

### Tr. Lines (as on 10-11-2014)

111,741 ckm

917 Nos.

### MVA & S/S (as on 10-11-2014)

218,134 MVA

186 Nos.

### Operating Parameters (H1FY15)

Availability: 99.89%

Reliability(\*): 0.34

(\*) Trippings/ line

## CREDIT RATINGS

• AAA  
• Stable  
**CRISIL**

**ICRA**  
• AAA  
• Stable

• AAA  
**CARE**

Domestic

International

• BBB (-)  
• Stable  
Outlook  
**S&P**

**Fitch**  
• BBB (-)  
• Stable  
Outlook

# Financial Highlights- Q2FY15



					(₹ in crore)
	Quarter ended		Half year ended		FY 2013-14
	30.09.2014	30.09.2013	30.09.2014	30.09.2013	
<b>Revenue</b>					
- Transmission Charges	4055	3713	7871	7104	14327
- Consultancy Income- Services	61	56	122	122	333
- Consultancy Revenue – Sale of Products	0	157	0	186	294
- Telecom	62	73	127	147	276
- Other Income	131	105	264	179	491
<b>Total Income</b>	<b>4309</b>	<b>4104</b>	<b>8384</b>	<b>7738</b>	<b>15721</b>
Operating Expenses(including prior period adjustment)	598	617	1167	1111	2295
<b>EBITDA-Gross Margin</b>	<b>3711</b>	<b>3487</b>	<b>7217</b>	<b>6627</b>	<b>13426</b>
Depreciation	1212	966	2367	1930	3996
Interest	989	801	1917	1561	3167
Tax	309	481	595	856	1766
<b>Profit after Tax</b>	<b>1201</b>	<b>1239</b>	<b>2338</b>	<b>2280</b>	<b>4497</b>

# Financial Highlights- Q2FY15

	(₹ in crore)		
	As on 31.03.2014	As on 30.06.2014	As on 30.09.2014
<b>Gross Fixed Assets</b>	96,504	101,382	106,085
Capital Work-in-Progress	53,330	53,345	54,827
<b>Debt</b>	80,470	84,685	88,110
<b>Net Worth</b>	34,413	35,526	36,753
<b>Earning Per Share (Rs)</b>	9.36	2.17*	4.47*
<b>Book Value per Share (Rs)</b>	65.78	67.91	70.25
<b>Key Financial Ratios</b>			
<b>Debt : Equity</b>	70:30	70:30	70.6:29.4
<b>Return on Net Worth</b>	13.07%	3.20%*	6.36%*

\* Not Annualised

# Billing & Realization

**Billing**

₹ 7,883 Crore

**Realization**

₹7,444 Crore

**%age realization**

94.43%

**Avg. Monthly Billing: ₹ 1,314 Crore => 2months (60 days) billing = ₹ 2,628 crore**

## Dues as on 05.11.2014

**(A) Due < 60 days (not outstanding as 60 days allowed by CERC) = ₹ 1,191 crore**

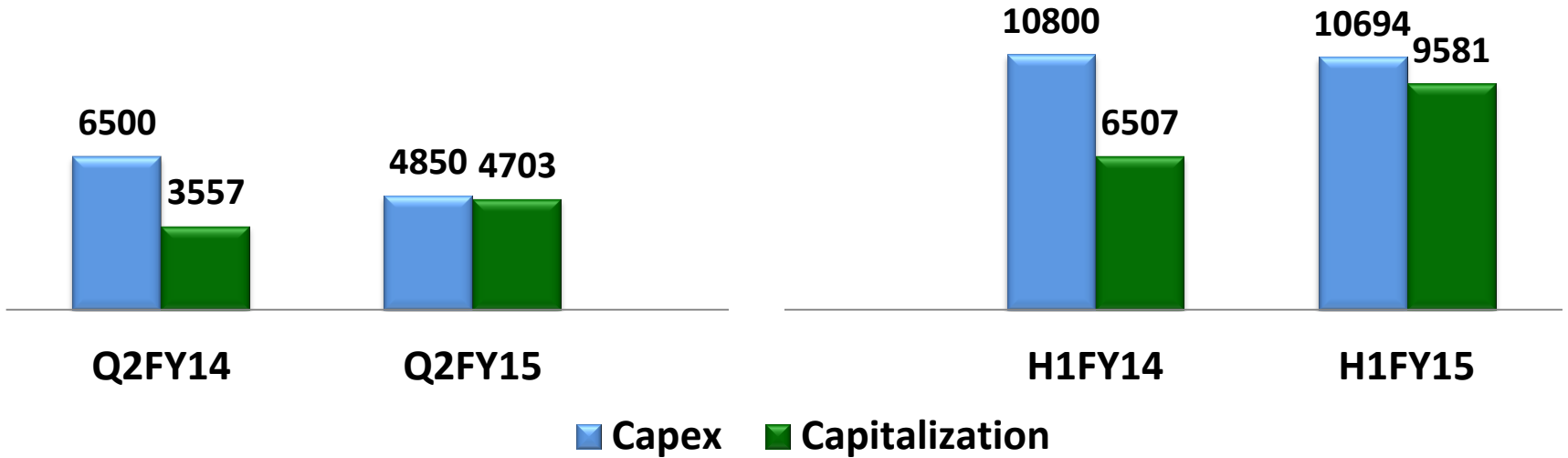
Description	₹ in Crore
<b>(B) Outstanding &gt; 60 days</b>	<b>333 *</b>
<b>Tied-Up payments (in installments)</b>	<b>133</b>

\* Excludes disputes on account of surcharge/bills .

**Outstanding equivalent to ~5 days billing**

# Project Execution – Q2 & H1FY15

(₹ in crore)



FY15

Till date

Capex

₹ 12,272 crore

Till date

Capitalization

~ ₹ 13,200 crore

# Projects in FY15

## Transmission Lines

~ 15,000 GW-ckm



### Major Lines

- Nellore-Thiruvalem
- Bina – Gwalior
- Champa-Raipur, Champa-Dharamjaygarh
- Indore - Vadodara
- Raichur – Kurnool, Nellore - Kurnool
- Rihand – V'chal,
- Jharsuguda – Dharamjaygarh
- Thiruvalem – Sholinganallur
- Annupur - Jabalpur
- Balipara - Bongaigaon
- Satna – Gwalior
- Wardha – Aurangabad, Raipur - Wardha
- V'chal – Satna
- Angul-Jharsuguda
- Gwalior – Jaipur, Jaipur – Bhiwani
- Vijayawada – Nellore,, Kurnool – Thiruvalem
- Barh – Gorakhpur
- Raigarh - Champa
- Silchar – Purba Kanchan Bari, Silchar - Imphal
- Salem – Madhugiri, Dharmapuri -Somnahalli
- Sholapur - Pune
- Biswanath Chariyali – Agra (NE-NR/WR Interconnector)
- Meerut - Moga
- Kanpur - Jhatikara

Aggregate ckm: ~10,000 (765kV: >60%)

## Sub-Stations

15 Nos.

~ 30,000 MVA



### Sub-stations

- Rangpo (GIS)
- Shahjahanpur
- Magarwada (GIS)
- Madhugiri
- Salem (Dharmapuri)
- Chaibasa
- Pune (GIS)
- Navi Mumbai (GIS)
- Bareilly
- Vadodara (GIS)
- Champa
- New Melli (GIS)
- Kanpur
- Biswanath Chariyali HVDC
- Agra HVDC

## Inter-Regional Capacity

7,300 MW



### Inter-Regional

- Jharsuguda – Dh'jaygarh (4,200MW)
- Barh - Gorakhpur
- Biswanath Chariyali – Agra (NE-NR/WR Interconnector)

## Physical Performance H1FY15 (Till date)

Tr. Line: GW-ckm	S/S Nos.	X-fmn. Cap.- MVA:	I-R Cap.- MW:
5,465 (8,590)	2 (3)	7,896 (12,841)	4,200 (4200)

Green font indicates assets commissioned till date

# Operations Highlights – H1FY15

## Assets under Management (as on 30-Sep-2014)

<b>Lines</b>	<b>911 Nos. 110,514 ckm</b>	<b>765kV(*): 17% 400kV: 73%</b>
<b>Sub-Stations</b>	<b>186 Nos. 213,819 MVA</b>	<b>765kV(*): 21% 400kV: 68%</b>

(\*) incl. HVDC & 765kV chgd at 400kV

## Asset Management (Apr14-Sep14)

**Availability:**  
99.89%

**Reliability:**  
0.34

**NTAMC**  
Operational

55 S/S remotely operated

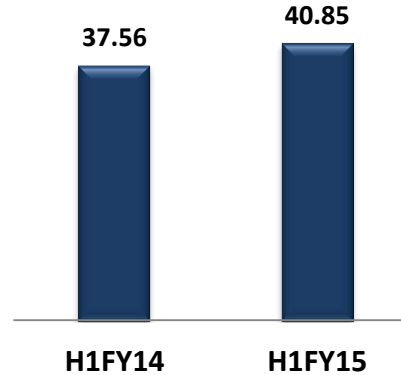
15 S/S unmanned

## New Initiatives in O&M

- Aerial Patrolling - under progress
- Maintenance of transmission lines
  - Using Helicopters
  - Insulated Bucket Trucks

## Grid Management<sup>1</sup> (POSOCO)

■ IR Energy Trf (BU)



**Short Term Open Access  
H1FY15**

**Transactions:  
19,336 Nos.**

**Energy Transacted:  
42.51BU**

**REC  
Trading:  
Q2FY15  
Update**

[RECs balance  
as on Sep-14:  
~ 99 lakh]

<b>Regd. Capacity (Sep-14)</b>	<b>4,548 MW</b> (Wind: 50%; Solar PV: 11%)
<b>RECs Issued</b>	28 lakh (Q2FY15) vs 13 lakh (Q2FY14)
<b>RECs Traded</b>	1.14 lakh (Q2FY15) vs 2.63 lakh (Q2FY14)
<b>Value of RECs Traded</b>	₹ 24 (Q2FY15) vs ₹ 48 cr. (Q2FY14)
<b>Aggregate RECs traded (till Sep14)</b>	<b>₹ 1274 crore</b>

**Sharp fall in REC trading in Q2FY15 w.r.t. Q2FY14**

# Consultancy Highlights - Q2FY15

## Domestic

### Q2 Orders

Total Nos.: 8

(Govt. Utilities : 6; Private: 1;  
Dist. works: 1)

Under execution  
(as on 30-Sep-14)

> 120 Assignments

Projects worth:  
~ ₹15,100 cr. (Bal. Cost)

### Recent Orders (after Q2FY14)

- Comprehensive Scheme: Intra-state and distribution works in Sikkim & Arunachal Pradesh
- XII Plan RGGVY works in 3 Districts in Oct'14 in Odisha
- 400kV & 220kV transmission system of Delhi Transco Ltd.

**Aggregate Project Cost: ₹ 4,700 crore**

## International

### Q2 Orders:

Total Nos. : 3  
(1 new client)

Under execution  
(as on 30-Sep-14)

15 Assignments

### Proposals submitted in Q2FY15

- 4 new proposals
- 2 new countries approached (Ghana & Indonesia)

**Company seeing traction in Capacity Building works in Asia and Africa**

Footprints in 18 countries

Afghanistan-Bangladesh-Bhutan-Congo-Ethiopia-Nepal-Nigeria-Kazakhstan-Kenya-Kyrgyz Republic-Myanmar-Pakistan-Senegal-Sri Lanka-Tajikistan-Tanzania-UAE-Uzbekistan



## Major Orders

### New Clients added: 14 Nos.

- Govt.: 8 Nos.
- Pvt.: 6 Nos.

### 20 year IRU agreement with a leading Telecom Company

- Aggregate bandwidth requirement: ~ 400 Gbps

Order received from a reputed global IT giant for 2 links

Confidence reposed by Global IT companies

## MPLS-VPN

- **4 Orders received in Q2FY15**
  - Total 7 orders since commercial launch in Apr'14
  - Company seeing a demand from CPSUs for its MPLS services
  - In-house demand for NTAMC and IT/ ERP applications

## NKN

- Size: ₹ 6,000 cr.  
POWERGRID Scope: ₹ 900 crore
- Project completed & under operation

## NOFN

- Size: ₹ 20,000 crore
- Sanction Letter recd for 4 States- Survey works completed- Estimate: ₹ 3,000 crore
- Execution commenced for ~ 3300 Gram Panchayats

# New Initiatives - Updates

- Order received from SAIL for Energy Audit of 2 Plants
  - Audit completed at 1 Plant
- Submitted bids for
  - Energy Audit of three more Steel Plants
  - Distribution Energy Audit in Meghalaya

## Energy Efficiency



- Offshore Wind Energy Company being set up by MNRE
  - POWERGRID to join
  - Evacuation/ integration of wind power with National Grid

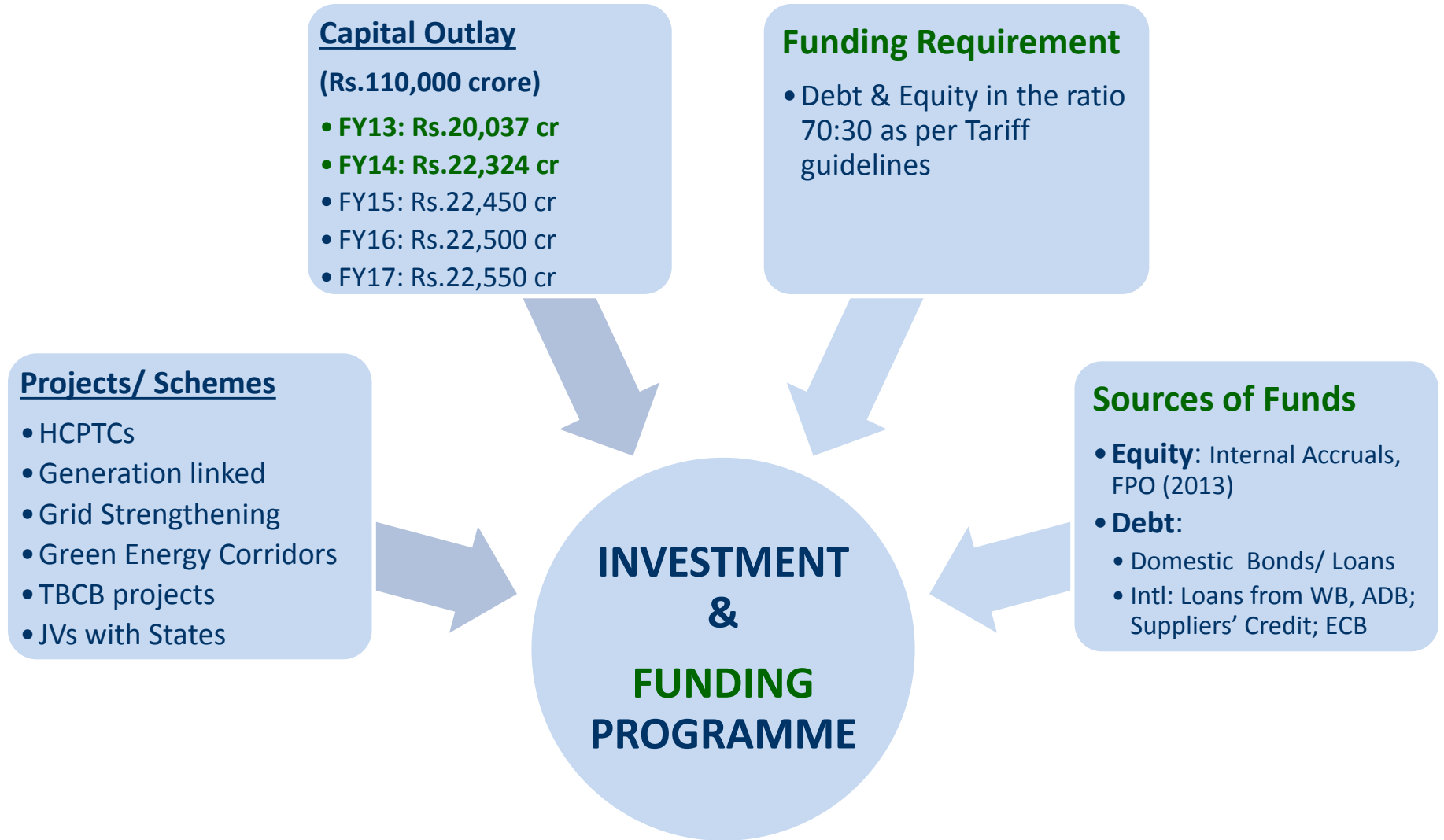
## Renewable Energy Integration



Exploring installation of Solar Power Plants to utilize earth electrode stn. land of HVDC terminals

- JV with Bihar for Intra-State Transmission (Bihar Grid Co. Ltd.) - ₹ 1600 crore worth projects commenced
- Formation of JV company with Rashtriya Ispat Nigam Limited (RINL) for setting up manufacturing facility for Transmission Line Towers & Tower Parts - Approved

# Investment & Funding Programme



**Investment Approved - ~ ₹ 101,800 crore**

**Debt: ~ Rs.60,000 crore tied up**

# Utilization of FPO funds- Update

## FPO funds

Funds raised:  
₹ 5321 crore

No. of Projects identified for  
fund utilization:  
27

Funds utilized till Oct14:  
~ ₹ 3,321 crore

~ 41 elements of 16 identified  
projects commissioned during  
Dec13 – Oct14

- ✓ TS associated with Rihand-III & V'chal-IV
- ✓ TS for Phase-I Generation Projects in Odisha (Part-C)
- ✓ SRSS – XIX
- ✓ TS strengthening in western part of WR for IPPs in Chhattisgarh
- ✓ TS associated with Krishnapatnam (Part-B)
- ✓ Common System associated with ISGS Projects in Krishnapatnam area of Andhra Pradesh
- ✓ Establishment of Pooling Stations at Champa and Raigarh (near Tamnar) for IPP generation projects in Chhattisgarh
- ✓ Establishment of Pooling Stations at Raigarh (Kotra) and Raipur for IPP generation projects in Chhattisgarh
- ✓ SRSS – XVIII
- ✓ TS for Phase-I generation projects in Odisha (Part-A)
- ✓ TS for IPP generation projects in MP & Chhattisgarh
- ✓ Integration of Pooling Stations in Chhattisgarh with central part of WR for IPP Generation Projects at Chhattisgarh
- ✓ TS for Phase-I generation projects in Odisha (Part-B)
- ✓ NRSS – XXI
- ✓ TS for establishment of 400/220kV GIS sub-station at Magarwada in UT Daman & Diu
- ✓ TS for transfer of power from generation projects in Sikkim to NR/WR – Part B

# Make in India & Swachh Bharat

## SVC & STATCOM Packages

- At least one SVC/STATCOM to be sourced from India

## 765kV Class Transformer/Reactor

- Foreign bidders to supply at least one Transformer/Reactor from India

## GIS Equipment

- 400kV: Indian subsidiaries of MNCs may also supply from their Indian Factories
- 765kV: Bidders to set up manufacturing facilities in India

## HTLS Conductors, OPGW & HVDC

- Thrust on Indigenization/ Indian collaboration

Swachh  
Bharat

Outlay under CSR

₹ 108 crore for building >9000  
toilets by August, 2015

*Thank You*